

8

Notice of Allowability	Application No.	Applicant(s)	
	10/017,396	ENDO, KAZUHIKO	
	Examiner	Art Unit	
	Yennhu B. Huynh	2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/15/04.
2. ☒ The allowed claim(s) is/are 1-14, 16 and 17.
3. ☒ The drawings filed on 18 December 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12/18/01</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other |
|--|--|


 CARL WHITEHEAD, JR.

SUPERVISORY PATENT EXAMINER
 TECHNOLOGY CENTER 2800

DETAILED ACTION

This Office Action is in response to the Amendment filed on 10/15/04.

Claims 15, 18 & 19 are cancelled by the Amendment filed on 10/15/04.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Oath/Declaration

Oath/Declaration filed on 12/18/01 is accepted.

Information Disclosure Statement

The information disclosure statement filed on 12/18/01 is being considered by the examiner.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas Perkins on 12/18/04.

The application has been amended as followed: Cancel claim numbers 20-38.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The title is as followed: Method of Forming A Silica Insulation Film With A Reduced Dielectric Constant.

Claim Rejections - 35 USC § 102

Claims amended overcome rejections. Rejections withdrawn.

Claim Rejections - 35 USC § 103

Claims amended overcome rejections. Rejections withdrawn.

Allowable Subject Matter

Claims 1-14, 16 & 17 are allowable over prior art of record.

The following is an examiner's statement of reasons for allowance: Prior art do not disclose a silica insulation film with reduced dielectric constant, which includes the steps of carrying out a chemical vapor deposition at not less than 500 C degrees to cause elimination reaction of the benzene nucleuses at the same time of deposition of the insulator, thereby to form the insulator including pores, in combination with other limitations (cl.1); wherein a main component of silicon dioxide, formed by a CVD, having at least one kind of organic substance including benzene nucleuses is used as a benzene nucleus source so that the insulator includes the benzene nucleuses, and wherein the benzene nucleuses are removed by causing a combustion reaction in an oxygen atmosphere, in combination with other limitations (cl.13); and wherein the insulator has been formed by the CVD, then the benzene nucleuses are removed from the insulator thereby to form pore in the insulator, and wherein the elimination reaction

Art Unit: 2813

is caused by exposed to oxygen radicals generated in a plasma, in combination with other limitations (cl.14).

The above limitations for claims 1, 13 & 14 are neither anticipated nor rendered obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on statement of Reasons for Allowance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yennhu B Huynh whose telephone number is 571-272-1692. The examiner can normally be reached on 8.30AM-7.00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached on 571-272-1702. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-7724.

YNBH,

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